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MONTHLY WEATHER REVIEW,

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WAR DEPARTMENT,

Office of the Chief Signal Officer,

DIVISION OF

TELEGRAMS AND REPORTS FOR THE BENEFIT OF COMMERCE AND AGRICULTURE

STORMS.

During the month of November twelve storms traversed the Territory of the United States; the storm-centres of all these, with one exception, moving within the region covered by the Signal Office Observations.

The following brief notices give the main facts of each storm:

No. I. Approached from the neighborhood of Pembina, on the 1st of November, and, after moving to the southern shore of Lake Superior, preserved an easterly course, reaching the Atlantic ocean, north of Nova Scotia, on the evening of the 3d. Its mean progressive velocity was therefore from twenty-five to thirty miles per hour, although its cyclonic winds were not very dangerous.

No. II. Followed nearly the same track, but attained somewhat higher velocity. It arrived in Northern Minnesota on the afternoon of the 3d of November, and reached the St. Lawrence valley on the evening of the 4th. It was accompanied by rain and light snow on the Lakes and eastward.

No. III. Coming from the Red River valley on the 6th, and crossing the Lakes, reached Kingston, Canada, on the morning of the 8th, and thence moved northeastwardly.

No. IV. Originated in the western part of the Gulf of Mexico, and moved along the Gulf and Atlantic coasts all the way to Nova Scotia. It started upon this track on the morning of the 6th, and reached Plaister Cove, Nova Scotia, on the morning of the 9th, averaging about thirty-two miles an hour. It was accompanied by fresh wind and rain on the seaboard, and on reaching the Maine coast it was marked by high and dangerous winds in its front. As usual with cyclones taking this track, as it neared Nova Scotia, the barometric depression increased and the cyclonic winds became more violent than when the meteor was moving on lower parallels of latitude.

No. V. Probably originated in Colorado, near the eastern slope of the Rocky Mountains, but was first seen in Kansas on the afternoon of the 10th, and moved first northward to St. Paul, Minnesota; thence on the 11th toward Milwaukee, sweeping eastward with destructive force over the Lakes, and thence to the northeastward. At Milwaukee the gale rose to thirty-two miles an hour, accompanied by high winds and heavy snow on Lake Michigan; and snow and rain on the other Lakes.

No. VI. November 16th, commenced its southeastwardly progress from Lake Superior (nearly due southeast) to Boston, passing over the latter place on the evening of the 16th, with heavy snow.

No. VII. Was perhaps the most remarkable continental cyclone of which the Signal Office observations furnish any details. It was generated about mid-day of the 16th, in Northern Georgia, and at once assumed a threatening aspect. During the night of the 16th and morning of the 17th, it steadily advanced to the vicinity of Wilmington, making about two hundred and forty miles in twelve hours, or about twenty miles an hour. Its course was thence northeastward along the inshore margin of the Gulf stream, which it tenaciously followed to latitude 43° north, whence it struck off into the Bay of Fundy, and thence to the mouth of the St. Lawrence river. All along, its track was marked, from Norfolk to Halifax and Father Point, by fierce gales, and the incoming vessels reported fearful seas off the coast. At Norfolk the barometer fell to 28.86 inches with rapidly shifting northeast, north, and northwest winds of high velocity on the 17th. Chimneys and fences were blown down, and the shipping in the harbor in many instances dragged their anchors. In the Chesapeake bay it was extremely severe. At Cape May the wind rose to forty miles, and the barometer fell to 28.76, with very heavy sea, reported by pilots from outside the worst gale known for years. At New Haven, on the morning of the 18th, the barometer fell to 28.72, (with increasing storm,) and at Wood's Hole to 28.60, and 28.61 at Boston, and 28.49 at Portland, Maine—the lowest observed barometers at the last-named points since they became signal stations. At Eastport, Maine, at about 6 a. m., on the 18th, the cyclone attained terrific force, its wind blowing 64 miles an hour. Its progress over the Canadian districts to the northward and eastward was equally violent. Its whole course was marked by heavy rain and snow, and its cyclonic indraught extended from the Middle Atlantic coast to the Upper Lakes.

No. VIII, First appeared in the Middle Missouri Valley on the 20th, and moved east to Toledo, whence its course was northeastward, and it soon disappeared.

No. IX. Was also of minor importance, having begun in Northern Lake Superior, and soon disappearing to the northeastward.

No. X Appears to have been generated near Santa Fe on the 22d, and thence moved toward Western Texas, from which locality, on the 23d, it advanced into the Lower Ohio Valley. Its course thence was in nearly a straight line to Halifax, where it is lost sight of. It was preceded by much rain and snow on the Lakes, and high winds on the New England coast.

Nos. XI and XII First appeared in the Northwest, on the 23d and 26th of November, respectively, and moved first southeastwardly to Michigan and the Lower Lakes, and thence northeastwardly, with brisk but not very high winds, and frequent rains and snows.

ANTI-CYCLONIC AREAS.

There have been eight decided areas of high barometer passing over the United States during the past month. These anti-cyclonic areas have first appeared in the Rocky Mountain region, and advanced southeastwardly. It is observable that as the